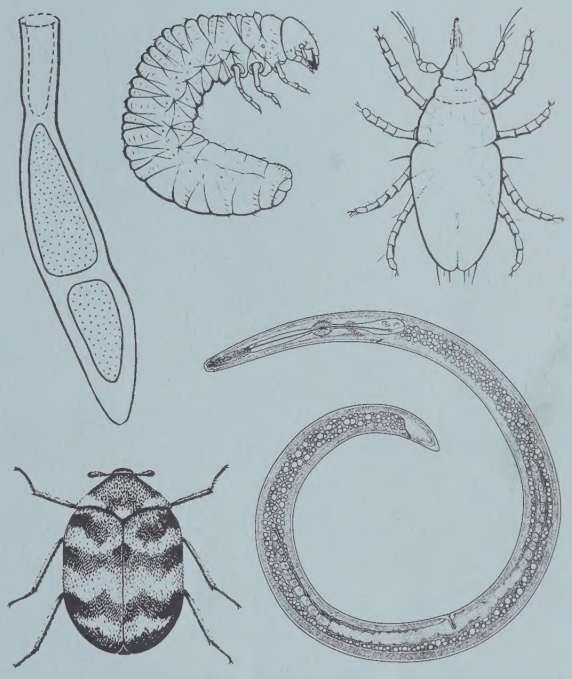
55/E

Agriculture
Canada

INTERCEPTED PLANT PESTS

1972-1973

CANADIAN
PLANT QUARANTINE



NSA
RAM
MM

14/11/74
- 3 SEP 1974

Issued by
PLANT PROTECTION DIVISION,
PRODUCTION & MARKETING
BRANCH,
CANADA DEPARTMENT
OF AGRICULTURE

CONTENTS

Introduction 1

Notes on pests intercepted 2

Pest-host lists

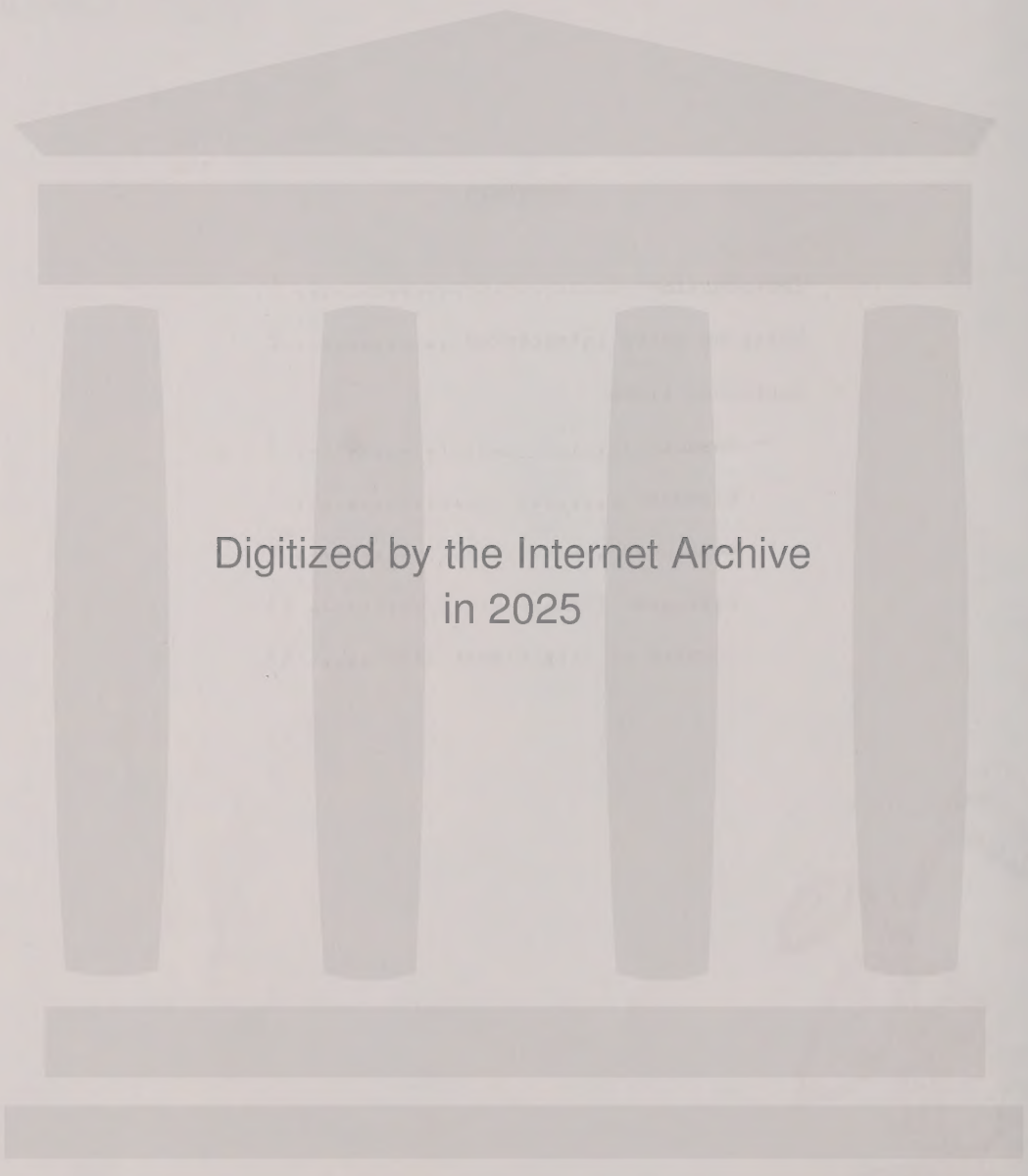
Insects 3

Diseases 7

Nematodes 9

Host-pest list 13

Country of origin-pest list 17


Digitized by the Internet Archive
in 2025

https://archive.org/details/intercepted-plant-pests_1972-1973

CANADA DEPARTMENT OF AGRICULTURE

Production and Marketing Branch — Plant Protection Division

LIST OF INTERCEPTED PLANT PESTS

April 1st, 1972 - March 31st, 1973

INTRODUCTION

This report summarizes the import interception records of the Plant Protection Division for the period April 1st, 1972, to March 31st, 1973, and includes plant pests found on plants, plant products, baggage, cargo, mail or carriers entering Canada. Pest records concerning pre-shipment inspection of flowering bulbs in the Netherlands, the Canadian Nursery Survey, Canadian Export Certification, and various domestic surveys may be found in other reports covering these activities. The following lists include only those pests which are considered to be of plant quarantine interest and a few which may be of interest because they are new to the country of origin or to the host plant or are of limited distribution in Canada.

In order to prepare a report of this type, Canadian distribution records for the various plant pests must be available and the taxonomy of the various groups must be relatively stable. Where there is insufficient information in regard to these requisites, the pests concerned are arbitrarily included in these lists.

In this report pests are recorded in three groups: "Insects, etc.", which includes mites and mollusca; "Diseases", which includes fungi, bacteria and viruses and "Nematodes". Imports are divided into three groups: the first two, "propagation" and "consumption" are separated on the basis of their obvious or intended use while the third "non-entry" refers to those interceptions of pests in the space of a carrier (ship, airplane, etc.) or on some product or plant within the carrier not intended to be moved into this country. In all cases, however, the carrier was present on Canadian soil or in Canadian waters at the time of inspection. The heading "Host (or carrier)" is used in this report because many of the plants associated with a specific pest may not necessarily be host plants, and soil or other materials not associated with plants at the time of interception may also carry pests. The term "Soil" is used only when no recognizable plant or plant material could be associated with the soil in which a pest was found.

Both the "Host" and "Origin" lists refer only to the name of the pest organism. The most complete information is available in the "Pest" list. A large number of the more common intercepted insects, mites, mollusca, fungi, bacteria and nematodes were not included in these lists, but information on these as well as more detailed information on those included here is on file and may be obtained by contacting the Director, Plant Protection Division, Ottawa.

With few exceptions, determinations of insects, nematodes and fungi were made or were confirmed by specialists in the Research Branch, Canada Agriculture. Mollusca were identified at the Canadian National Museum. In certain centres, inspectors are qualified to make identifications of specific pests because of frequent interceptions of the pest from the same state or country. However, even such identifications are checked by specialists from time to time. The scientific names in the lists are those provided by each specialist at the time the determinations were made. Many pests were incompletely determined, but those which may be of quarantine significance are included in the lists.

Notes on Pests Intercepted

During the fiscal year covered by this report a total of 1,089 pest interceptions were made. This total is lower than that of the previous year when there were 1,218 pest interceptions.

The following table compares the total interceptions for each of the three pest groups with the related totals which are of quarantine significance or other interest.

The figures in brackets are those for the previous year, 1971-72.

	No. of Interceptions	
	Total No.	Total of P.Q. Significance
Nematodes	380 (434)	186 (246)
Fungi and Viruses	269 (165)	48 (46)
Insects and Molluscs	440 (619)	182 (179)
Grand Total	1,089 (1,218)	416 (471)

Some of the pests which were intercepted for the first time were: Adoretus sinicus, a Scarabaeid from Hawaii which feeds on Rosaceae; Anomala ? varicolor, a Scarabaeid from the Orient; Hymenia recurvalis, the beet webworm on "Calalu" food greens from Jamaica; Scapsipedus marginatus, a cricket of plant pest significance from Mexico; Gloeotinia temulenta "blind seed disease" twice on grass seed from U.S.A.; little cherry virus on ornamental plum from England and quince stunt virus on pear from Europe and New York. Puccinia horiana, 'white rust of Chrysanthemums' was found on cut 'mums' from Japan; Heterodera glycines, the soybean-cyst nematode was found twice in soil on agricultural machinery from Japan, Heterodera latipons, a cereal-cyst nematode, was found on plants from Spain and France and Heterodera rostochiensis, the potato-cyst nematode was intercepted at least 22 times from seven countries in Europe.

The majority of the pests marked by an asterisk were found in air passengers' baggage.

A.E. Straby,
Central Identification Laboratory,
Plant Protection Division.

June 1974

PEST (insect, etc.)	HOST (or carrier)	COUNTRY OF ORIGIN	NO. OF INTERCEPTIONS IN Propagation	Consumption	Non-Entry	COLLECTED IN
Acedes fuscipunctella (Haw.) (Tineidae):						
	Grain residue in ship	Unknown			5	N.B. (1), B.C. (4x)
✱	Grain in baggage	Hong Kong		1		B.C.
Acedes pallescentella (Staint.) "Large pale clothes moth" (Tineidae):						Que. (13x) N.B. (4x)
	Grain residue in ship	Unknown		1	48	Ont. (3x), B.C.(29x)
Adoretus sinicus Burm. (Scarabaeidae) (first interception):						
✱	*Anthurium*	Hawaii	1			B.C.
Ancylostomia stercorea Zell. (Phycitidae):						
	Cajanus cajan	Jamaica	1			Ont.
Anomala ? varicolor (Gyll.) (Scarabaeidae) (first interception):						
	Airplane space	Hong Kong ?			1	B.C.
Archips sp. or near (Tortricidae):						
	Rosa	England	1			B.C.
Arianta arbustorum (L.) "a snail" (Helicidae):						
	Pinus	Holland	1			N.S.
Arion intermedius Normand "a slug" (Arionidae):						
	Cotoneaster	Belgium	1			Que.
Aspidiella hartii (Cockerell) (Diaspididae) (first interception):						
	Dioscorea (yam)	Trinidad		1		Alta.
Aspidiotus hederae (Vallot) "Ivy scale" (Diaspididae):						
✱	Plants (woody)	Italy	2			N.S., B.C.
Bruchidius sp. (Bruchidae) (first interception):						
	Leguminaceae (seed)	Surinam	1			Ont.
Bruchus rufimanus Boh. "Broadbean weevil" (Bruchidae):						
	Vicia faba	Italy	1			Ont.
		Japan	1			B.C.
Callosobruchus chinensis Linn. "Southern cow pea weevil" (Bruchidae):						
	Phaseolus sp. (mung beans etc.)	Hong Kong	1	1		B.C. (2x)
	"Black beans"	Hong Kong		1		B.C.
	Seeds (unidentified)	Lebanon	1			P.E.I.
Callosobruchus maculatus (Fab.) "Cow pea weevil"(Bruchidae):						
	Phaseolus sp. (mung beans etc.)	Hong Kong		1		B.C.
	Bean seeds	Hong Kong	1			B.C.
	Plants (dried)	Hong Kong		1		B.C.
	Zea (corn)	Fiji		1		B.C.
Carpophilus obsoletus (Erichson) (Nitidulidae):						
✱	*Allium*	Malaysia		1		B.C.

✱ A shipment prohibited by regulation

PEST (insect, etc.)	HOST (or carrier)	COUNTRY OF ORIGIN	NO. OF INTERCEPTIONS IN Propagation	Consumption	Non-Entry	COLLECTED IN
Chrysolina americana Linn. (Chrysomelidae) (first positive interception):						
✱ Rosmarinus		Italy		2		Ont. (2x)
Chrysomphalus ficus Ashmead "Florida Red Scale" (Diaspididae):						
	Dracaena	Fla. (USA)	2			Ont.
	Palm	Fla. (USA)	1			B.C.
Conotrachelus perseae Barber (Curculionidae) (first interception):						
	Persea (fresh avocados)	El Salvador		1		B.C.
Corcyra cephalonica Stainton "Rice moth" (Pyralididae):						
✱ Thymus		Portugal	1			Que.
Dacus dorsalis Hendel "The Oriental Fruit Fly" (Tephritidae):						
	Mangifera (Mango fruit)	Hawaii (USA)		2		B.C.
Deroceras laeve Muller (Limacidae):						
	Armoracia (horse radish)	Japan	1			B.C.
Diceroprocta apache Davis (Cicadidae) (first interception):						
	Baggage	USA (state?)		1		B.C.
Dinoderus brevis Horn (Bostrichidae):						
	Wood (boat)	Fiji		1		B.C.
	Wood (Bamboo garden stakes)	Japan ?		1		B.C.
Ectomyelois ceratoniae (Zell.) (Phycitidae):						
	Ananas	Hawaii (USA)		1		B.C.
Gracilaria azaleella Brants "Azalea leaf miner" (Gracilariidae):						
	Rhododendron	Cal. (USA)	1			Ont.
		Wash. (USA)	1			B.C.
Grapholitha molesta Busck. "Oriental fruit moth" (Olethreutidae):						
	Prunus (Fresh peaches)	USA (state?)		1		B.C.
Helix aspersa (Muller) "Brown garden snail" (Helicidae):						
	Baggage	Italy		1		Ont.
	Baggage	Greece		1		B.C.
	Bambusa plants	Cal. (USA)	3			B.C. (3x)
	Palmaceae (plant)	Cal. (USA)	1			B.C.
	Plants (woody)	Cal. (USA)		1		B.C.
	Truck (space)	Cal. (USA)		1		B.C.
Hymenia recurvalis (FAB) "Hawaiian Beet Webworm" (Pyraustidae) (first interception):						
	Amaranthus 'Calalu' W. Indian spinach	Jamaica		1		Ont.
Ischnodemus sp. (lygaeidae) (first interception):						
	Malus sp. (fresh apples)	S. Africa		1		Que.

✱ A shipment prohibited by regulation

PEST (insect, etc.)	HOST (or carrier)	COUNTRY OF ORIGIN	NO. OF INTERCEPTIONS IN Propagation	Consumption	Non-Entry	COLLECTED IN
Lasius neoniger Emery (Formicidae):						
	Baggage	Jamaica		1		Ont.
	Garcinia (fruit)	Fiji		1		B.C.
Laspeyresia splendana Hbn. "Nut fruit tortrix" (Olethreutidae):						
	Castanea (chestnuts)	Italy		1		Que.
		Spain		1		Que.
Limax flavus L. "Tawny garden slug." (Limacidae):						
	Citrus (trees)	Cal. (USA)	1			B.C.
Limax maximus L. "Spotted garden slug" (Limacidae):						
	Vitis	France	1			Que.
Limax Sp. (Limacidae) "a slug":						
	Vitis	France	1			Que.
Lyctus brunneus (steph.) "Powder post beetle" (Lyctidae):						
	Wood (bamboo curtains)	Unknown		1		B.C.
Lymantriidae "unidentified tussock moths" (Lepidoptera):						
	Fagus pendula	Belgium		1		Ont.
Maruca testulalis (Geyer) (Pyraustidae):						
	Green beans	Fiji		1		B.C.
	Pisum ? (peas)	Fiji		1		B.C.
	Vegetables (fresh)	Fiji		1		B.C.
Monomorium destructor (Jerdon) (Formicidae):						
	Soil	Fla. (USA)	1			Ont.
	Cocos (shredded coconuts)	Philippines		1		B.C.
Noctuidae "unidentified cut worms" (Lepidoptera):						
	Amaranthus "calalu" W. Indian spinach	Jamaica		1		Ont.
	Cactus	U.K.	1			B.C.
	Colocasia "Taro leaves"	Fiji	1			B.C.
	Hibiscus (okra)	Fiji		1		B.C.
	Schefflera	Fla. (USA)	1			B.C.
	Vegetables (fresh)	Fiji		1		B.C.
	Zea Mays	Jamaica			1	Ont.
Obobia rubigalis (Guenée) (Pyraustidae) (first interception):						
	Hemigraphis "waffle plant"	Fla. (USA)	1			B.C.
Orchidophilus sp. (Curculionidae) (first interception):						
	Orchidaceae	Philippines	1			B.C.
Otala vermiculata Müll. (Helicidae) (first interception):						
	Baggage	Italy		1		Ont.
	Baggage	Greece		1		B.C.
Paratrechina longicornis (Latreille) "Crazy Ant" (Formicidae):						
	Artocarpus	Trinidad		1		B.C.

PEST (insect, etc.)	HOST (or carrier)	COUNTRY OF ORIGIN	NO. OF INTERCEPTIONS IN Propagation	Consumption	Non-Entry	COLLECTED IN
Platyptilia pica (Wlsm.) "The geranium plume moth" (Pterophoridae):						
	Pelargonium	Cal. (USA)	1			B.C.
Reticulitermes sp. prob. flavipes (Kollar) "Subterranean termites" (Rhinotermitidae):						
	Wood (as termite housing)	USA (state?)		1		B.C.
Rhizopertha dominica (Fab.) "Lesser grain borer" (Bostrichidae):						N.B.(2x), Que.(11x)
	Grain residue in ship	Unknown			30	Ont.(5x), B.C.(12x)
Scapsipedus marginatus (Alfzel & Brann) (Gryllidae) (first interception):						
	Air plane	Mexico			1	B.C.
Sinoxylon anale Lesne (Bostrichidae):						
	Wood (slats with cloth)	Pakistan		1		N.B.
	Wood (crating)	Pakistan		1		Ont.
Sitotroga cerealella (Oliv.) "Angoumois Grain Moth" (Gelechiidae):						
	Grain residue in ships	Unknown			6	Que, B.C. (5x)
Sterrha ? inquinata (Scop.) "herbarium sponworm" (Geometridae):						
	Mentha (dried)	Italy		1		Alta.
Theba pisana L. "White garden snail" (Helicidae):						
	Baggage	Italy		1		Ont.
Thyridopteryx ephemeraeformis (Haw.) "a bagworm" (Psychidae):						
	Lonicera	Ala. (USA)	1			Ont.
Tortrix citrana Fernald (Tortricidae):						
	Citrus (oranges)	Cal. (USA)		1		B.C.
Tortrix ? franciscana (Wishm.) (Tortricidae) (first interception):						
	Malus (fresh fruit)	Cal. (USA)		1		B.C.
Trogoderma granarium Everts "Khapra beetle" (Dermestidae):						
	Grain Residue in ship	Unknown			1	B.C.
	Brassica (seed)	India		1		B.C.
	Wood (plywood)	Unknown		1		B.C.
Trogoxylon prostomoides (Gorham) Lyctidae):						
	Wood (slats with cloth)	Pakistan		1		N.B.
	Wood (musical instrument)	Uganda		1		Ont.
	Wood (bamboo basket)	Mexico		1		B.C.

PEST (disease)	HOST (or carrier)	COUNTRY OF ORIGIN	NO. OF INTERCEPTIONS IN Propagation	Consumption	Non-Entry	COLLECTED IN
Chlorotic Leaf Spot & Spy Decline Virus:						
Malus var's:	G.X.C. 6590.1.1	Holland	1			B.C. (P.E.Q.)
	Rosie de Cluj	Romania	1			B.C. (P.E.Q.)
	Frumes de Voinesti .	Romania	1			B.C. (P.E.Q.)
	Cox's orange	England	1			B.C. (P.E.Q.)
	N.Y.444 28-5	N.Y. (USA)	1			B.C. (P.E.Q.)
	Wellington	N.Y. (USA)	1			B.C. (P.E.Q.)
Gloeotinia temulenta Prill. & Delac. "blind seed disease" (first interception):						
Lolium (perennial rye seed)		Wash. (USA)	1			Ont.
Poa (Kentucky blue grass)		Ore (USA)	1			Ont.
Grape vine leafroll virus:						
Vitis var's:	Pinot Noir	France	1			B.C. (P.E.Q.)
	Gamay	France	1			B.C. (P.E.Q.)
	Pinot Noir S/101-14	France	1			B.C. (P.E.Q.)
	Pinot Noir Proit S/S04	France	1			B.C. (P.E.Q.)
	Red Muscatel	S. Africa	1			B.C. (P.E.Q.)
	Cabernet Sauvignon .	USA (state?)	1			B.C. (P.E.Q.)
Gymnosporangium juniperi-virginianae Schw. "The Cedar-Apple Rust" (Uredinales):						
Juniperus		Minn. (USA)	1			Alta.
Little Cherry Virus (first interception):						
Prunus serrulata (U. Kon)		England	1			B.C. (P.E.Q.)
Macrophoma ? *millepunctata* Berl. & Vogl. (Sphaeropsidaeceae) (first interception)						
Aralia (leaves)		Fla. (USA)	1			Que.
Prune dwarf & /or necrotic ring spot virus:						
Prunus armeniaca var. Murgab		Cal. (USA)	1			B.C. (P.E.Q.)
Prunus avium & *P. cerasus* var:						
	H. Baneasa	Yugoslavia	1			B.C. (P.E.Q.)
	Vladimirskaia	Yugoslavia	1			B.C. (P.E.Q.)
	Bladorozouoe	Poland	1			B.C. (P.E.Q.)
	Cherna Konyauska ...	Bulgaria	1			B.C. (P.E.Q.)
	Kokoset weich sel ..	Yugoslavia	1			B.C. (P.E.Q.)
	Sel 1/3	Yugoslavia	1			B.C. (P.E.Q.)
	Sel 1/1	Yugoslavia	1			B.C. (P.E.Q.)
Prunus persica var 1V/20		Yugoslavia	1			B.C. (P.E.Q.)
Puccinia graminis "Stem rust" (Uredinates):						
✱ *Triticum* (wheat sheaf)		Italy	1	1		Que. (2x)
Puccinia graminis f. sp. *secalis* Eriks. & Hem.:						
Agropyron ? *repens* (couch grass)		Czechoslovakia	1			B.C.
Puccinia horiana P. Henn. "White rust of mums" (Uredinales):						
Chrysanthemum (cut flowers)		Japan		1		B.C.
Puccinia hordei Otth. (Uredinales) (first interception):						
Hordeum		Belgium	1			Alta.

✱ A shipment prohibited by regulation

P.E.Q. Post Entry Quarantine Station, Saanichton

PEST (disease)	HOST (or carrier)	COUNTRY OF ORIGIN	NO. OF INTERCEIPTIONS IN Propagation	Consumption	Non-Entry	COLLECTED IN
Puccinia recondita Rob. et Desm. (Uredinales):						
⁂ Triticum	(Wheat sheaf)	Italy		1		Que.
Quince stunt virus (first interception):						
Pyrus sp. var's	Communis	Europe	1			B.C. (P.E.Q.)
	Dumont	N.Y. (USA)	1			(2x)
Stem pitting virus (first interception):						
Malus sp. var	N.Y. 55166-23	N.Y. (USA)	1			B.C. (P.E.Q.)
Vein yellows virus:						
Pyrus sp. var's:	Communis	Europe	1			B.C. (P.E.Q.)
	138-5-22	Romania	1			(3x)
	Dumont	N.Y. (USA)	1			
Virus group complex (Fanleaf, yellow mosaic, vein banding):						
Vitis sp. var's:	J. Riesling	France	1			
	Florental	France	1			B.C.
	Marechal Foch ...	France	1			(P.E.Q.)
	Cardinal	Italy	1			(10x)
	Johannesburg Riesling	France	1			
	Florental N/5BB .	France	1			
	Vidal 256-3	France	1			
	G1 31-17-115	W. Germany	1			
	Cabernet Sauvignon	USA (State	1			
	M. Foch	France	1			

⁂ A shipment prohibited by regulation

P.E.Q. Post Entry Quarantine Station, Saanichton

PEST (nematode)	HOST (or carrier)	COUNTRY OF ORIGIN	NO. OF INTERCEPTIONS IN Propagation	Consumption	Non-Entry	COLLECTED IN
Heterodera rostochiensis Woll. 1923 "The potato-cyst nematode" (Heteroderidae):						
	Allium (leeks)	France		1		Que.
✱	*Begonia*	England	1			B.C.
✱	*Cactus*	England	1			B.C.
✱	*Dianthus*	Spain	1			Que.
		W. Germany	1			Ont.
✱	*Erica*	Scotland	1			Ont.
	Fagus	Denmark	1			B.C.
✱	*Mentha*	England	1			B.C.
✱	*Narcissus*	England	1			N.S.
✱	*Primula*	England	1			B.C.
✱	Plants (herbaceous)	England	7			N.S.(4x), Nfld(1x), Man.(1x), B.C.(1x)
		Scotland	1			N.S.
		Ireland	1			Alta.
		Europe	1			Man.
✱	Soil	England		2		Alta (2x)
Heterodera ? *rostochiensis* (Heteroderidae):						
✱	Tractor (with soil)	Japan		1		B.C.
Heterodera schachtii Schmidt 1871 "The sugar beet-cyst nematode" (Heteroderidae):						
	Allium (leeks)	France	1			N.B.
✱	Automobile (with soil)	Belgium		1		N.B.
✱	*Calluna* (heather)	England	1			Que.
✱	*Dianthus*	Spain	1			Que.
Heterodera sp. poss. new						
✱	Plants (herbaceous)	U.K.	1			B.C.
Meloidogyne arenaria (Neil 1889) Chitwood 1949 "The peanut root-knot nematode" (Heteroderidae):						
	Rosa	Holland	1			Que.
		Texas (USA)	2			B.C.
Meloidogyne hapla Chitwood, 1949 "The northern root-knot nematode" (Heteroderidae):						
	Hydrangea sp.	Tenn. (USA)	1			B.C.
	Ligustrum	Tenn. (USA)	1			B.C.
	Lonicera	Tenn. (USA)	1			Ont.
	Lycopersicon (tomato seedlings)	Ga. (USA)	1			Ont.
	Philadelphus	Tenn. (USA)	1			B.C.
	Rosa	Holland	3			Que.
		Cal. (USA)	3			Ont.
		Texas (USA)	5			Ont.(1x), B.C.(4x)
Meloidogyne incognita (Kofoid and White, 1919) Chitwood, 1949 (Heteroderidae):						
✱	*Hoya*	Italy	1			N.S.
	Lycopersicon (tomato seedlings)	Ga. (USA)	5			Ont.
		Miss. (USA)	1			Ont.
	Rosa	Texas (USA)	5			B.C.
	Wiegela	Tenn. (USA)	1			Ont.
Meloidogyne incognita acrita Chitwood 1949 (Heteroderidae):						
	Rosa	Texas (USA)	1			B.C.

✱ A shipment prohibited by regulation

PEST (nematode)	HOST (or carrier)	COUNTRY OF ORIGIN	NO. OF INTERCEPTIONS IN Propagation	Consumption	Non-Entry	COLLECTED IN
Heterodera cruciferae Franklin 1945 (Heteroderidae):						
	Allium (leeks)	France		1		Que.
	Cynara (artichoke)	France	1			Que.
✱	Plants (woody)	Europe	1			Alta.
Heterodera estonica Kirjanova & krall 1963 (Heteroderidae):						
	Vitis sp.	France	1			Que.
Heterodera fici Kirjanova 1954 "The fig cyst nematode" (Heteroderidae):						
	Amaryllis	N.J. (USA)	1			Ont.
✱	Plants (herbaceous)	Italy	2			B.C.
✱	Plants (woody)	Italy	1			B.C.
✱	*Rosemarinus*	Italy	2			Que.
Heterodera glycines Ichinohe, 1952 (Heteroderidae) (first interception):						
✱	Agricultural machinery (Tractor with soil)	Japan		1		B.C.
✱	Automobile (with soil)	Japan		1		B.C.
Heterodera goettingiana Liebscher 1892 "The pea-root eelworm" (Heteroderidae):						
✱	Agricultural machinery (tractor with soil)	Japan		1		B.C.
✱	*Ceanothus*	England	1			B.C.
✱	Plant (herbaceous)	Portugal	1			Que.
Heterodera sp. near *goettingiana*:						
✱	Tractor (with soil)	Japan		1		B.C.
Heterodera humuli Filip. 1934 "The hop-cyst nematode" (Heteroderidae):						
✱	Automobile (with soil)	U.K.		1		N.S.
✱	*Begonia*	Portugal	2			Que.
✱	Plants (herbaceous)	England	11			N.S.
		Europe	2			Man.
		France	1			Que.
		Italy	1			Alta.
		Poland	1			Ont.
✱	Plant (woody)	Belgium	1			N.S.
Heterodera latipons Franklin 1969 "A cereal-cyst nematode" (Heteroderidae):						
✱	*Hydrangea*	France	1			Que.
✱	*Saintpaulia* (African violet)	Spain	1			Que.
Heterodera punctata Thorne 1928 "Grass-cyst nematode" (Heteroderidae):						
	Allium (leeks)	France		1		Que.
✱	Automobile (with soil)	U.K.		1		N.S.
✱	Automobile (bus with soil)	England		1		B.C.
✱	*Calluna* & *Quercus*	England	1			Alta.
✱	*Ceanothus*	England	1			B.C.
	Chamaecyparis	Netherlands	1			Alta.
✱	Plant (herbaceous)	England	5			Man.(1x), B.C.(1x) N.S.(2x), Alta.(1x)
✱	Soil	England		3		N.S., Man., Alta.

✱ A shipment prohibited by regulation

PEST (nematode)	HOST (or carrier)	COUNTRY OF ORIGIN	NO. OF INTERCEPTIONS IN Propagation	Consumption	Non-Entry	COLLECTED IN
Aphelenchoides sp. "Foliar nematodes" (Aphelenchoididae):						
	Allium (onion sets)	Holland	1			Que.
Criconemoides curvatum Raski, 1952 "A ring nematode" (Criconematidae):						
*	Plants (woody)	Yugoslavia	1			B.C.
Ditylenchus destructor Thorne, 1945 "Potato-rot nematode" (Tylenchidae):						
	Iris	Wash. (USA)	2			B.C. (2x)
Ditylenchus myceliophagus (Tylenchidae) (first interception):						
*	Plants (woody)	W. Germany	1			Ont.
Helicotylenchus pseudorobustus (Tylenchidae) (Steiner 1914) Golden 1956:						
	Pinus	Ga. (USA)	1			Ont.
Helicotylenchus sp. new sp. (Tylenchidae):						
	Soil	Cuba			1	Ont.
Helicotylenchus sp. (Tylenchidae):						
*	Soil (in paper weights)	India		1		Man.
	Acer rubrum	Tenn. (USA)	1			B.C.
Heterodera avenae Woll. 1924(Filip. 1934) "The oat-cyst nematode" (Heteroderidae):						
*	Automobile (with soil)	France		1		Que.
*	Clivia	Belgium	1			Que.
*	Calluna & Quercus sp.	England	1			Alta.
*	Nerium	Italy	1			Que.
	Plants (woody)	Belgium	1			N.S.
	" "	W. Germany	1			Ont.
*	Plants (herbaceous)	England	3			N.S., Alta., B.C.
		Denmark	1			Alta.
Heterodera bifenestra Cooper 1955 (Heteroderidae):						
*	Automobile (with soil)	W. Germany		1		Que.
	Prunus (plum)	Netherlands	1			B.C.
Heterodera cacti Filip. & Stek. 1941 "The cactus-cyst nematode" (Heteroderidae):						
*	Automobile (with soil)	U.K.		1		N.S.
		France		1		Que.
*	Agricultural machinery (tractor with soil)	Japan		1		B.C.
*	Cactus	England	1			B.C.
*	Cactus	Holland	1			N.S.
*	Citrus (cuttings)	Italy	1			Alta.
*	Crassula	England	1			Alta.
	Elaeagnus	Iowa (USA)	1			Ont.
*	Fushia	Italy	1			Que.
*	Mentha	England	1			B.C.
*	Plants (herbaceous)	Scotland	1			N.S.
		England	2			Man. & B.C.
Heterodera sp. near cacti (Heteroderidae):						
	Allium (leeks)	France		1		Que.

* A shipment prohibited by regulation

PEST (nematode)	HOST (or carrier)	COUNTRY OF ORIGIN	NO. OF INTERCEPTIONS IN Propagation	Consumption	Non-Entry	COLLECTED IN
Meloidogyne javanica (Treub, 1885) Chitwood, 1949 (Heteroderidae):						
	Lycopersicon (tomato seedlings)...	Ga. (USA)	1			Ont.
	.....	Miss. (USA)	1			Ont.
Meloidogyne sp. (Heteroderidae):						
	Rosa	Cal. (USA)	22			Ont.
	.....	Texas (USA)	4			Ont.
	Tilia	Holland	1			Ont.
Pratylenchus penetrans (Cobb. 1917) Filip. & Stek. 1941 (Tylenchidae):						
	Picea	W. Germany	1			Alta.
Rotylenchus fallorobustus Sher 1965 "A spinal nematode" (Tylenchidae):						
	Juniperus	W. Germany	1			Alta.
Rotylenchus reniformis Linford and Oliveira, 1940 (Tylenchidae) (first interception):						
	Soil	Cuba			1	Ont.
Rotylenchus robustus (de Man 1876) Filipjev 1936 (Tylenchidae):						
	Juniperus	W. Germany	1			Alta.
Rotylenchus sp. (Tylenchidae):						
	Juniperus	Holland	1			Ont.
Tylenchorhynchus dubius (Butschli, 1873) Filipjev, 1936 (Tylenchidae):						
	Juniperus	W. Germany	1			Alta.
Tylenchus exiguus (de Man, 1876) (Tylenchidae) (first interception):						
	✱ Plants (woody)	W. Germany	1			Ont.
	.....	Yugoslavia	1			B.C.
Xiphinema americanum Cobb. 1913 (Longidoridae):						
	Pinus	Ga. (USA)	1			Ont.

✱ A shipment prohibited by regulation

Hosts (or carriers) of Intercepted Pests

ACER:
- Helicotylenchus sp. (Nematode)

AGRICULTURAL MACHINERY(Tractors):
- Heterodera cacti "
- Heterodera glycines "
- Heterodera goettingiana (2x) "
- Heterodera ? rostochiensis "

AGROPYRON:
- Puccinia grammis f. sp. secalis (Fungus) "

AIRPLANE:
- Anomala ? varicolor (Insect)
- Scapsipedus marginatus "

ALLIUM:
- Carpophilus obsoletus "
- Aphelenchoides sp. (Nematode)
- Heterodera sp. near cacti "
- Heterodera cruciferae "
- Heterodera punctata "
- Heterodera rostochiensis "
- Heterodera schachtii "

AMARANTHUS:
- Hymenia recurvalis (Insect)
- Noctuidae (unindentified cutworm) "

AMARYLLIS:
- Heterodera fici (Nematode)

ANANAS:
- Ectomyelois ceratoniae (Insect)

ANTHURIUM:
- Adoretus sinicus "

ARALIA:
- Macrophoma ? millepunctata (Fungus)

ARMORACIA (horseradish):
- Deroceras laeve (Slug)

ARTOCARPUS:
- Paratrechina longicornis (Insect)

AUTOMOBILE:
- Heterodera avenae (Nematode)
- Heterodera bifenestra "
- Heterodera cacti (2x) "
- Heterodera glycines "
- Heterodera humuli "
- Heterodera punctata (2x) "
- Heterodera schachtii "

BAGGAGE:
- Diceroprocta apache (Insect)
- Helix aspersa (2x) (Snail)
- Lasius neoniger (Insect)
- Otala vermiculata (2x) (Snail)
- Theba pisana "

BAMBUSA (Plants & wood curtains):
- Helix aspersa (3x) "
- Lyctus brunneus (Insect)

BEAN SEEDS:
- Callosobruchus chinensis "
- Callosobruchus maculatus (2x) "

BEGONIA:
- Heterodera humuli (2x) (Nematode)
- Heterodera rostochiensis "

BRASSICA:
- Trogoderma granarium (Insect)

CACTUS:
- Heterodera cacti (2x) (Nematode)
- Heterodera rostochiensis "
- Noctuidae (unindentified cutworm) (Insect)

CAJANUS (Pigeon pea):
- Ancylostomia stercorea "

CALLUNA (heather):
- Heterodera avenea (Nematode)
- Heterodera punctata "
- Heterodera schachtii "

CASTANEA (chestnuts):
- Laspeyresia splendana (2x) (Insect)

CEANOTHUS:
- Heterodera goettingiana (Nematode)
- Heterodera punctata "

CHAMAECYPARIS:
- Heterodera punctata (Nematode)

CHRYSANTHEMUM:
- Puccinia horiana (Fungus)

CITRUS (Plants):
- Limax flavus (Snail)
- Heterodera cacti (Nematode)

CITRUS (Fruit):
- Tortrix citrana (Insect)

Hosts (or carriers) of Intercepted Pests

CLIVIA:
- *Heterodera avenae* (Nematode)

COCOS:
- *Monomorium destructor* (Insect)

COLOCASIA:
- Noctuidae (unidentified cutworm) "

COTONEASTER:
- *Arion intermedius* (Slug)

CRASSULA:
- *Heterodera cacti* (Nematode)

CYNARA (artichoke):
- *Heterodera cruciferae* "

DIANTHUS:
- *Heterodera rostochiensis* (2x) "
- *Heterodera schachtii* "

DIOSCOREA:
- *Aspidiella hartii* (Insect)

DRACAENA:
- *Chrysomphalus ficus*(2x) "

ELAEAGNUS:
- *Heterodera cacti* (Nematode)

ERICA:
- *Heterodera rostochiensis* "

FAGUS:
- Lymantriidae (unidentified tussock moth) (Insect)
- *Heterodera rostochiensis* (Nematode)

FRESH VEGETABLES:
- *Maruca testulalis*(2x) (Insect)
- Noctuidae (unindentifed cutworm) "

FUSCHIA:
- *Heterodera cacti* (Nematode)

GARCINIA (Fruit):
- *Lasius neoniger* (Insect)

GRAIN (In baggage):
- *Acedes fuscipunctella* "

GRAIN (Residue on ship):
- *Acedes fuscipunctella*(5x) (Insect)
- *Acedes pallescentella*(49x) "
- *Rhizopertha dominica*(30x) "
- *Sitotroga cerealella* (6x) "
- *Trogoderma granarium* "

HEMIGRAPHIS:
- *Obobia rubigalis* "

HIBISCUS:
- Noctuidae (unidentified cutworm) "

HORDEUM:
- *Puccinia hordei* (Fungus)

HOYA:
- *Meloidogyne incognita* (Nematode)

HYDRANGIA:
- *Heterodera latipons* "
- *Meloidogyne hapla* "

IRIS:
- *Ditylenchus destructor*(2x) "

JUNIPERUS:
- *Rotylenchus fallorobustus* "
- *Rotylenchus robustus* "
- *Rotylenchus* sp. "
- *Tylenchorhynchus dubius* "
- *Gymnosporangium juniperi-virginianae* (Fungus)

LEGUMINOUS SEED:
- *Bruchidius* sp. (Insect)

LOLIUM:
- *Gloeotinia temulenta* (Fungus)

LONICERA:
- *Thyridopteryx ephemeraeformis* (Insect)
- *Meloidogyne hapla* (Nematode)

LYCOPERSICON:
- *Meloidogyne hapla* "
- *Meloidogyne incognita* (6x) "
- *Meloidogyne javanica* (2x) "

MANGIFERA (Mango):
- *Dacus dorsalis* (2x) (Insect)

Hosts (or carriers) of Intercepted Pests

MALUS (Fruit):
- Ischnodemus sp. (Insect)
- Tortrix franciscana "

MALUS (Plants):
- Chlorotic Leaf Spot & Spy Decline Virus (6x) (Virus)
- Stem pitting virus "

MENTHA:
- Sterrha ? inquinata (Insect)
- Heterodera cacti (Nematode)
- Heterodera rostochiensis "

NARCISSUS:
- Heterodera rostochiensis "

NERIUM
- Heterodera avenae "

ORCHIDACEAE:
- Orchidophilus sp. (Insect)

PALMACEAE:
- Chrysomphalus ficus "
- Helix aspersa (Snail)

PELARGONIUM:
- Platyptilia pica (Insect)

PERSEA (fresh avocado):
- Conotrachelus perseae "

PHASEOLUS (Mung beans, etc.):
- Callosobruchus chinensis(2x) "
- Callosobruchus maculatus

PHILADELPHUS
- Meloidogyne hapla (Nematode)

PICEA:
- Pratylenchus penetrans "

PINUS:
- Arianta arbustorum (Snail)
- Helicotylenchus pseudo-robustus (Nematode)
- Xiphinema americanum "

PISUM:
- Maruca testulalis (Insect)

PLANTS (Dried):
- Callosobruchus maculatus "

PLANTS (herbaceous):
- Heterodera avenae (4x) (Nematode)
- Heterodera cacti (3x) "
- Heterodera fici (2x) (Nematode)
- Heterodera goettingiana "
- Heterodera humuli (16x) "
- Heterodera punctata (5x) "
- Heterodera rostochiensis(10x) "
- Heterodera sp. poss. new "

PLANTS (Woody):
- Aspidiotus hederae (2x) (Insect)
- Helix aspersa (Snail)
- Criconemoides curvatum (Nematode)
- Ditylenchus myceliophagus "
- Heterodera avenae (2x) "
- Heterodera cruciferae "
- Heterodera fici "
- Heterodera humuli "
- Tylenchus exiguus (2x) "

POA:
- Gloeotinia temulenta (Fungus)

PRIMULA:
- Heterodera rostochiensis (Nematode)

PRUNUS (Peach fruit):
- Grapholitha molesta (Insect)

PRUNUS (Plants):
- Heterodera bifenestra (Nematode)
- Litte cherry virus (Virus)
- Prune Dwarf and/or Necrotic Ring Spot Virus (9x) "

PYRUS:
- Quince Stunt virus (2x) "
- Vein Yellow virus (3x) "

QUERCUS:
- Heterodera avenae (Nematode)
- Heterodera punctata "

ROSA:
- Archips sp. or near (Insect)
- Meloidogyne arenaria (3x) (Nematode)
- Meloidogyne hapla (11x) "!
- Meloidogyne incognita (5x) "
- Meloidogyne incognita acrita "
- Meloidogyne sp. (26x) "

ROSMARINUS:
- Chrysolina americana (2x) (Insect)
- Heterodera fici (2x) (Nematode)

RHODODENDRON:
- Gracilaria azalella (2x) (Insect)

Hosts (or carriers) of Intercepted Pests

SAINTPAULIA:	
Heterodera latipons	(Nematode)
SCHEFFLERA:	
Noctuidae (unidentified cutworm)	(Insect)
SOIL:	
Monomorium destructor	"
Helicotylenchus sp. new sp.	(Nematode)
Helicotylenchus sp.	"
Heterodera punctata (3x)	"
Heterodera rostochiensis(2x)	"
Rotylenchus reniformis	"
TILIA:	
Meloidogyne sp.	"
THYMUS:	
Corcyra cephalonica	(Insect)
TRITICUM (Dried wheat plants)	
Puccinia graminis (2x)	(Fungus)
Puccinia recondita	(Fungus)
TRUCK (Space):	
Helix aspersa	(Snail)
UNIDENTIFIED SEEDS:	
Callosobruchus chinensis	(Insect)
VICIA:	
Bruchus rufimanus (2x)	"
VITIS:	
Limax maximus	(Slug)
Limax sp.	"
Heterodera estonica	(Nematode)
Grape vine leaf roll virus (6x)	(Virus)
Virus Group Complex (Fan-leaf, Yellow mosaic, Vein banding) (10x)	"
WIEGELA:	
Meloidogyne incognita	(Nematode)
WOOD:	
Dinoderus brevis (2x)	(Insect)
Reticulitermes sp. prob. flavipes	(Termite)
Sinoxylon anale (2x)	(Insect)
Trogoderma granarium	"
Trogoxylon prostomoides(3x)	"
ZEA (fresh corn):	
Callosobruchus maculatus	"
Noctuidae (unidentified cutworm)	"

Countries of Origin of Pests Intercepted

BELGIUM:

Arion intermedius	(Slug)
Lymantriidae (unknown tussock moth)	(Insect)
Heterodera avenae (2x)	(Nematode)
Heterodera humuli	"
Heterodera schachtii	"
Puccinia hordei	(Fungus)

BULGARIA:

Prune dwarf and/or Necrotic ring spot virus on Prunus	(Virus)

CUBA:

Helicotylenchus sp. (new sp.)	(Nematode)
Rotylenchus reniformis	"

CZECHOSLOVAKIA:

Puccinia graminis f. sp. secalis	(Fungus)

DENMARK:

Heterodera avenae	(Nematode)
Heterodera rostochiensis	"

EL SALVADOR:

Conotrachelus perseae	(Insect)

ENGLAND:

Archips sp. or near	(Insect)
Heterodera avenae (2x)	(Nematode)
Heterodera cacti (5x)	"
Heterodera goettingiana	"
Heterodera humuli (11x)	"
Heterodera punctata (11x)	"
Heterodera rostochiensis (14x)	"
Heterodera schachtii	"
Chlorotic Leaf Spot & Spy Decline Virus on Malus	(Virus)
Little cherry virus on Prunus	(Virus)

EUROPE:

Heterodera cruciferae	(Nematode)
Heterodera humuli (2x)	"
Heterodera rostochiensis	"
Quince stunt virus on Pyrus	(Virus)
Vein yellows virus on Pyrus	"

FIJI:

Callosobruchus maculatus	(Insect)
Dinoderus brevis	"
Lasius neoniger	"
Maruca testulalis (3x)	"
Noctuidae (unidentified cut worms) (3x)	"

FRANCE:

Limax maximus	(Slug)
Limax sp.	"
Heterodera avenae	(Nematode)
Heterodera cacti	"
Heterodera sp. near cacti	"
Heterodera cruciferae (2x)	"
Heterodera estonica	"
Heterodera humuli	"
Heterodera latipons	"
Heterodera punctata	"
Heterodera rostochiensis	"
Heterodera schachtii	"
Grape vine leaf roll virus (4x) on Vitis	(Virus)
Virus Group Complex (Fanleaf, Yellow Mosaic, Vein Banding) 7x on Vitis	"

GERMANY (WEST):

Ditylenchus myceliophagus	(Nematode)
Heterodera avenae	"
Heterodera bifenestra	"
Heterodera rostochiensis	"
Pratylenchus penetrans	"
Rotylenchus fallorobustus	"
Rotylenchus robustus	"
Tylenchorhynchus dubius	"
Tylenchus exiguus	"
Virus Group Complex (Fanleaf, Yellow Mosaic, Vein banding) on Vitis	(Virus)

GREECE:

Helix aspersa	(Snail)
Otala vermiculata	(Snails)

HONG KONG:

Acedes fuscipunctella	(Insect)
Anomala ? varicolor	"
Callosobruchus chinensis(3x)	"
Callosobruchus maculatus(3x)	"

INDIA:

Trogoderma granarium	"
Helicotylenchus sp.	(Nematode)

IRELAND:

Heterodera rostochiensis	"

ITALY:

Aspidiotus hederae(2x)	(Insect)
Bruchus rufimanus	"
Chrysolina americana(2x)	"
Helix aspersa	(Snail)
Laspeyresia splendana	(Insect)
Otala vermiculata	(Snails)

Countries of Origin of Pests Intercepted

ITALY (continued):

Sterrha ? inquinata	(Insect)
Theba pisana	(Snails)
Heterodera avenae	(Nematode)
Heterodera cacti(2x)	"
Heterodera fici(5x)	"
Heterodera humuli	"
Meloidogyne incognita	"
Puccinia graminis(2x)	(Fungus)
Puccinia recondita	"
Virus group complex (fan-leaf, yellow mosaic, vein banding) on Vitis	(Virus)

JAMAICA:

Ancylostomia stercorea	(Insect)
Hymenia recurvalis	"
Lasius neoniger	"
Noctuidae (unidentified cutworm) (2x)	"

JAPAN:

Bruchus rufimanus	"
Deroceras laeve	(Slug)
Dinoderus brevis	(Insect)
Heterodera cacti	(Nematode)
Heterodera glycines (2x)	"
Heterodera goettingiana	"
Heterodera sp. near goettingiana	"
Heterodera ? rostochiensis	"
Puccinia horiana	(Fungus)

LEBANON:

Callosobruchus chinensis	(Insect)

MALAYSIA:

Carpophilus obsoletus	"

MEXICO:

Scapsipedus marginatus	"
Trogoxylon prostomoides	"

NETHERLANDS:

Arianta arbustorum	(Snail)
Aphelenchoides sp.	(Nematode)
Heterodera bifenestra	"
Heterodera cacti	"
Heterodera punctata	"
Meloidogyne arenaria	"
Meloidogyne hapla(3x)	"
Meloidogyne sp.	"
Rotylenchus sp.	"
Chlorotic leafspot & spy decline virus on Malus	(Virus)

PAKISTAN:

Sinoxylon anale (2x)	(Insect)
Trogoxylon prostomoides	"

PHILIPPINES:

Callosobruchus maculatus	"
Orchidophilus sp.	"
Monomorium destructor	"

POLAND:

Prune dwarf and/or Necrotic Ring Spot virus on Prunus	(Virus)
Heterodera humuli	(Nematode)

PORTUGAL:

Corcyra cephalonica	(Insect)
Heterodera goettingiana	(Nematode)
Heterodera humuli (2x)	"

ROMANIA:

Chlorotic leafspot & spy decline virus on Malus	(Virus)
Vein yellows virus on Pyrus	"

SCOTLAND:

Heterodera cacti	(Nematode)
Heterodera rostochiensis(2x)	"

SOUTH AFRICA:

Grape vine leafroll virus on Vitis	(Virus)
Ischnodemus sp.	(Insect)

SPAIN:

Laspeyresia splendana	"
Heterodera latipons	(Nematode)
Heterodera rostochiensis	"
Heterodera schachtii	"

SURINAM:

Bruchidius sp.	(Insect)

TRINIDAD:

Aspidiella hartii	"
Paratrechina langicornis	"

UNITED KINGDOM:

Noctuidae(unidentified cutworm)	"
Heterodera cacti	(Nematode)
Heterodera humuli	"
Heterodera punctata	"
Heterodera sp. poss. new	"

Countries of Origin of Pests Intercepted

UNITED STATES OF AMERICA (BY STATES):

ALABAMA:
- Thyridopteryx ephemeraeformis (Insect)

CALIFORNIA:
- Gracilaria azaleella "
- Helix aspersa (6x) (Snail)
- Limax flavus "
- Platyptilia pica (Insect)
- Tortrix citrana "
- Tortrix ? franciscana "
- Meloidogyne hapla (3x) (Nematode)
- Meloidogyne sp. (22x) "
- Prune dwarf and/or Necrotic Ring Spot Virus on Prunus (Virus)

FLORIDA:
- Chrysomphalus ficus (3x) (Insect)
- Monomorium destructor "
- Noctuidae (unidentified cutworm) "
- Obobia rubigalis "
- Macrophoma ? millepunctata (Fungus)

GEORGIA:
- Helicotylenchus pseudorobustus (Nematode)
- Meloidogyne hapla "
- Meloidogyne incognita(5x) "
- Meloidogyne javanica "
- Xiphinema americanum "

HAWAII:
- Adoretus sinicus (Insect)
- Dacus dorsalis (2x) "
- Ectomyelois ceratoniae "

IOWA:
- Heterodera cacti (Nematode)

MINNESOTA:
- Gymnosporangium juniperivirginianae (Fungus)

MISSISSIPPI:
- Meloidogyne incognita (Nematode)
- Meloidogyne javanica "

NEW JERSEY:
- Heterodera fici "

NEW YORK:
- Chlorotic leaf spot and Spy decline virus(2x) on Malus (Virus)

NEW YORK (Continued):
- Quince stunt virus on Pyrus (Virus)
- Stem pitting virus on Malus "
- Vein yellows virus on Pyrus "

OREGON:
- Gloeotinia temulenta (Fungus)

TENNESSEE:
- Helicotylenchus sp. (Nematode)
- Meloidogyne hapla (4x) "
- Meloidogyne incognita "

TEXAS:
- Meloidogyne arenaria (2x) "
- Meloidogyne hapla (5x) "
- Meloidogyne incognita (5x) "
- Meloidogyne incognita acrita "
- Meloidogyne sp. (4x) "

WASHINGTON:
- Gracilaria azaleela (Insect)
- Ditylenchus destructor(2x) (Nematode)
- Gloeotinia temulenta (Fungus)

USA - STATE ? :
- Diceroprocta apache (Insect)
- Grapholitha molesta "
- Reticulitermes sp. prob. flavipes "
- Grape vine leafroll virus on Vitis (Virus)
- Virus Group Complex (Fanleaf, yellow mosaic, vein banding) on Vitis "

UGANDA:
- Trogoxylon prostomoides (Insect)

UNKNOWN:
- Acedes fuscipunctella(5x) "
- Acedes pallescentella (49x) "
- Lyctus brunneus "
- Rhizopertha dominica (30x) "
- Sitotroga cerealella (6x) "
- Trogoderma granarium (2x) "

YUGOSLAVIA:
- Criconemoides curvatum (Nematode)
- Tylenchus exiguus "
- Prune dwarf and/or Necrotic Ring Spot Virus on Prunus (6x) (Virus)